REMARKS / ARGUMENTS

With respect to Claims 1, 3-4 rejections, Burrell, IV (5,993,089) **does not** disclose or teach eight bit code activation with a first four bit code combined with a second four bit code. Burrell, IV (5,993,089) discloses, teaches, and claims an eight bit code produced when eight sensors are activated simultaneously by four fingers on the left hand and four fingers on the right hand. In Burrell, IV (5,993,089), FIG. 6 shows the eight bit code taught as a standard eight dot braille cell format with tactile separators. The blind use six dot braille cells or eight dot braille cells and do not use a three dot braille cell combined with a three dot braille cell or a four dot braille cell combined with a four dot braille cell. In order for Burrell, IV (5,993,089) to work for the blind, the standard eight dot braille cell requires tactile separators between every eight dot braille cell for the tactile reader to differentiate between the vowels a, e, i or o. The Braille Authority of North America (BANA) tested the eight dot braille, without the tactile separators, found in Burrell, IV (5,993,089) and refused to use or adopt the eight bit code as an authorized eight dot braille code because the tactile reader was unable to differentiate between the vowels a, e, i or o.

In Burrell, IV 5,993,089, FIG. 6, clearly the examiner can see that the eight bit code taught and claimed is not a first four bit code combined with a second four bit code and uses a large dot for an active bit and no dot for an inactive dot. In FIG. 4A, 4B and 4C, of the pending patent application, a first four bit code combined with a second four bit code and uses a large dot for an active bit and a small dot for an inactive dot.

When the present patent application FIG. 4A, 4B and 4C drawings were done, the inventor still did not know how to produce spaces between the 4 dot Marlett font

braille cells. The inventor's deafandblind.com website shows how the lines between 4 dot braille cells have been replaced with spaces. The deafandblind.com/braille.htm page shows the sizable Marlett font braille with spaces between 4 dot braille cells. The deafandblind.com/braille.html page shows the JPEG font braille with spaces between 4 dot braille cells.

With respect to Claims 2 and 19 rejections, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) discloses and teaches the numeric bit values for the bits in an eight bit code. The pending application discloses and teaches the numeric bit values for the bits in a left first four bit code bit code combined with a right second four bit code bit code. A tactile braille reader moving their finger across the pending braille arrangement will feel four left dots, then four right dots.

With respect to Claim 5 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) discloses and teaches the activation of all eight sensors to produce the "Insert" function and the pending application discloses and teaches activating eight sensors to enter a first four sensor mode combined with a second four sensor mode.

With respect to Claim 6 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activating at least one character to produce data but produces data by activating at least one sensor of eight sensors. The pending application discloses and teaches producing data by activating at least one sensor of four first sensors or four second sensors to produce a data character.

With respect to Claim 7 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activating at least one character to produce a function but produces functions by activating at least four sensors of eight sensors. The pending application discloses and teaches producing functions by activating at least one sensor of four first sensors or four second sensors to produce a function.

With respect to Claim 8 rejection, Burrell, IV (5,993,089) **does not** disclose or teach producing more than one data character when at least one sensor of eight sensors is activated. The pending application discloses and teaches producing more than one data character by activating at least one sensor of four first sensors or four second sensors to produce a data character string.

With respect to Claim 9 rejection, Burrell, IV (5,993,089) discloses and teaches producing a data character by activating at least one sensor of eight sensors and **does not** disclose or teach activating at least one sensor of eight sensors followed by activating at least one sensor of eight sensors to produce a data character. The pending application discloses and teaches producing a data character by activating at least one sensor of four first sensors or four second sensors followed by activating at least one sensor of four first sensors or four second sensors. A data character is produced by the secondary activation of at least one sensor of four first sensors or four second sensors.

With respect to Claim 10 rejection, Burrell, IV (5,993,089) discloses and teaches producing a data character by activating at least one sensor of eight sensors and **does**

not disclose or teach activating at least one sensor of eight sensors followed by activating at least one sensor of eight sensors to produce a data character string. The pending application discloses and teaches producing a data character string by activating at least one sensor of four first sensors or four second sensors followed by activating at least one sensor of four first sensors or four second sensors. A data character string is produced by the secondary activation of at least one sensor of four first sensors or four second sensors.

With respect to Claim 11 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activation of one set of sensors **and then** the non-activation of another set of sensors to produce a vowel but discloses and teaches activation of at least one sensor of a first set of four binary sensors when **used in simultaneous combination** with a second set of four binary sensors to produce a logical four left bit combined with a four right bit readable eight bit binary code arrangement. A left set and a right set of four binary sensors **must be** used in simultaneous combination to produce an eight bit binary code arrangement. The pending application discloses and teaches activating at least one sensor of a first set of four sensors followed by non-activating a second set of four sensors to produce a vowel. Activating at least one sensor of a first set of four sensors produces a vowel. FIG. 4A, 4B and 4C in the pending application drawings disclose and teach at least one active sensor of a first set of four sensors produces a vowel.

With respect to Claim 12 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activation

of at least one sensor of the first and second sensor set to produce a vowel but discloses and teaches activation of at least one sensor of a first set of four binary sensors when **used in simultaneous combination** with the activation of at least one sensor of a second set of four binary sensors to produce a logical four left bit combined with a four right bit readable eight bit binary code arrangement. A left set and a right set of four binary sensors **must be** used in simultaneous combination to produce an eight bit binary code arrangement. The pending application discloses and teaches activating at least one sensor of a first set of four sensors followed by activating at least one sensor of a second set of four sensors to produce a vowel. FIG. 4A, 4B and 4C in the pending application drawings disclose and teach at least one active sensor of a first set of four sensors followed by at least one active sensor of a second set of four sensors produces a vowel.

With respect to Claim 13 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activation of at least one sensor of the first and second sensor set to produce a consonant but discloses and teaches activation of at least one sensor of a first set of four binary sensors when **used in simultaneous combination** with the activation of at least one sensor of a second set of four binary sensors to produce a logical four left bit combined with a four right bit readable eight bit binary code arrangement. A left set and a right set of four binary sensors **must be** used in simultaneous combination to produce an eight bit binary code arrangement. The pending application discloses and teaches activating at least one sensor of a first set of four sensors followed by activating at least one

sensor of a second set of four sensors to produce a consonant. FIG. 4A, 4B and 4C in the pending application drawings disclose and teach at least one active sensor of a first set of four sensors followed by at least one active sensor of a second set of four sensors produces a consonant.

With respect to Claim 14 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activation of at least one sensor of the second sensor set to produce a space but discloses and teaches non-activation of a first set of four binary sensors when **used in simultaneous combination** with the activation of one sensor of a second set of four binary sensors to produce a logical four left bit combined with a four right bit readable eight bit binary code arrangement. A left set and a right set of four binary sensors **must be** used in simultaneous combination to produce an eight bit binary code arrangement. The pending application discloses and teaches activating at least one sensor of a second set of four sensors to produce a space. FIG. 4A, 4B and 4C in the pending application drawings disclose and teach at least one active sensor of a second set of four sensors produces a space.

With respect to Claim 15 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activation of at least one sensor of the second sensor set to produce a punctuation mark but discloses and teaches non-activation of a first set of four binary sensors when **used in simultaneous combination** with the activation of one sensor of a second set of four binary sensors to produce a logical four left bit combined with a four right bit readable

eight bit binary code arrangement. A left set and a right set of four binary sensors **must be** used in simultaneous combination to produce an eight bit binary code arrangement. The pending application discloses and teaches activating at least one sensor of a second set of four sensors to produce a punctuation mark. FIG. 4A, 4B and 4C in the pending application drawings disclose and teach at least one active sensor of a second set of four sensors produces a punctuation mark.

With respect to Claim 16 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activation of at least one sensor of the first and second sensor set to produce a symbol but discloses and teaches activation of at least one sensor of a first set of four binary sensors when **used in simultaneous combination** with the activation of at least one sensor of a second set of four binary sensors to produce a logical four left bit combined with a four right bit readable eight bit binary code arrangement. A left set and a right set of four binary sensors **must be** used in simultaneous combination to produce an eight bit binary code arrangement. The pending application discloses and teaches activating at least one sensor of a first set of four sensors followed by activating at least one sensor of a second set of four sensors to produce a symbol. FIG. 4A, 4B and 4C in the pending application drawings disclose and teach at least one active sensor of a first set of four sensors followed by at least one active sensor of a second set of four sensors produces a symbol.

With respect to Claim 17 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activation

of at least one sensor of the first and second sensor set to produce a number but discloses and teaches activation of at least one sensor of a first set of four binary sensors when **used in simultaneous combination** with the activation of at least one sensor of a second set of four binary sensors to produce a logical four left bit combined with a four right bit readable eight bit binary code arrangement. A left set and a right set of four binary sensors **must be** used in simultaneous combination to produce an eight bit binary code arrangement. The pending application discloses and teaches activating at least one sensor of a first set of four sensors followed by activating all sensors of a second set of four sensors to produce a number. FIG. 4A, 4B and 4C in the pending application drawings disclose and teach at least one active sensor of a first set of four sensors followed by all active sensors of a second set of four sensors produces a number.

With respect to Claim 17 rejection, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) **does not** disclose or teach activation of at least one sensor of the first and second sensor set to produce a function but discloses and teaches activation of at least one sensor of a first set of four binary sensors when **used in simultaneous combination** with the activation of at least one sensor of a second set of four binary sensors to produce a logical four left bit combined with a four right bit readable eight bit binary code arrangement. A left set and a right set of four binary sensors **must be** used in simultaneous combination to produce an eight bit binary code arrangement. The pending application discloses and teaches activating at least one sensor of a first set of four sensors followed by activating all but one sensor

of a second set of four sensors to produce a function. FIG. 4A, 4B and 4C in the pending application drawings disclose and teach at least one active sensor of a first set of four sensors followed by all but one active sensor of a second set of four sensors produces a function.

With respect to Claim 32 rejection, Burrell, IV (5,993,089) and any other prior art **does not** disclose or teach shifting (switching) into a second mode by entering at least one data character. Burrell, IV (5,993,089) does teach entering an eight sensor chord as a number mode or function mode which switches out of the number mode or function mode with the next eight sensor chord. The pending application discloses and teaches shifting into a second mode by entering at least one data character. This Claim states that entering a data character followed by the enter function, enters the data character's mode. Entering a data character "6" followed by the enter function, enters the 6-dot braille mode.

With respect to Claim 33-35 rejections, the Amended Claims should now satisfy the rejections of the Examiner. Burrell, IV (5,993,089) and any prior art **does not** disclose or teach shifting into a second mode by entering a language code data character string, a country code data character string or a country's area code data character string. Burrell, IV (5,993,089) does disclose and teach entering an eight sensor chord to produce a non-English data character. The pending application discloses and teaches shifting out of the standard English data entry into a secondary language mode by entering a language code data character string, a country code data character string or a country's area code data character string.

With respect to Claim 20-31 rejections, the Amended Claims should now satisfy the rejections of the Examiner. The rejection of Claims 20 through 31 as being obvious and unpatentable based on no prior art reverences is respectfully traversed. Burrell, IV (5,993,089) **does not** disclose or teach activation of a single sensor to move an object in any direction. Burrell, IV (5,993,089) and any prior art **does not** disclose or teach activation of a single sensor on at least eight sensors to move an object in any direction. The pending application discloses and teaches activation of a single sensor on at least eight sensors to move an object in any direction. The preferred embodiment of the present invention, found in the pending patent application, would use eight fingers positioned on the home row of a split space bar computer keyboard. Activation of the left or right space bar while in the standard typing mode will produce a space. Activation of the left and right space bar simultaneously while in the standard typing mode will exit the standard typing mode and enter a two sensor movement mode. Activation of the left and right space bar simultaneously while in the two sensor movement mode will exit the two sensor movement mode and enter a second two sensor movement mode or return to the standard typing mode. It would not have been obvious to one of ordinary skill in the art to use two sensors to move an object in two opposite directions. The two sensor movement invention on at least eight sensors would have been used or would have been prior art if it were obvious. The particular fingers used to activate the sensors is not an obvious choice of the user. Most computer keyboards do not have a left and right space bar. An operator would not use his or her pinky to achieve two sensor movement on at least eight sensors. Use of the pinkies to achieve two sensor movement would require at least ten sensors.

In reply to the Examiner's remark that a user is not required to use his or her thumb to activate a particular sensor. After filing the present patent application, the inventor approached Tink, located in New York City, to manufacture his "Virtual Keyboard" technology using their screen printed sensors. After becoming aware of the two sensor movement technology using at least eight sensors, Tink started presenting the two sensor movement technology to clients. Realizing the claims in the present patent application were not broad enough to protect the two sensor movement technology for use in games, the Inventor filed pending patent application "**TWO SENSOR MOVEMENT**".

The prior art reference Holden (US 4,655,621) and European Patent Office Patent Application 0134160 requires at least ten keys, one for each finger, and up to twenty-eight keys for the invention to work. A reduction in the amount of keys used to produce data, four keys or at least eight keys in the pending patent application, would constitute an improvement in data entry technology. Therefore the Holden prior art reference is invalid.

CONCLUSION

The present invention, found in the pending patent application, constitutes an improvement in the art of chordic keyboard data entry found in any prior art or in U.S. patent 5,993,089 to Burrell, IV. The pending patent application uses a first four bit code combined with a second four bit code to produce a new 8 dot braille arrangement, a new chordic data entry method for all alphanumeric data for two handed or one handed individuals, a new method of entering multilingual alphanumeric data, an improved faster method of movement using only two sensors on a keyboard and an improved faster method of fixing typographical errors on a keyboard while entering data. The differences between the new subject matter taught and claimed in the pending patent application and all previous prior art references would not have been obvious at the time the invention was made to one of ordinary skill in the art. Accordingly, the prior art patents do not teach or disclose the claimed features of the amended Claims 1 through 36. For these reasons, it is respectfully submitted that applicant's Claims 1 through 36 should be allowed. Therefore, the invalid Claim rejections should be withdrawn and the pending patent application should be issued.

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